신경근육재활 및 전기진단

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:08-10:12 Room G(3F)

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Pan-brachial Plexopathy as a Presentation of Diffuse Large B Cell Lymphoma.

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Introduction

Neurolymphomatosis is a rare manifestation of hematological malignancy and is characterized by direct infiltration into the peripheral nervous system. It is known to have a typical pattern of progressive painful neuropathy and diffuse or nodular thickening of the affected nerve on enhanced MRI. Involvement of the brachial plexus is rare and outcomes seemed to be more poor in diffuse large B cell lymphoma(DLBCL). We report a rare case of a DLBCL patient who presented pan-brachial plexopathy, which was not the result of mass effect of lymphoma.

Case report

A 67-year-old female presented 3-months of pain in left shoulder and rapid progression of weakness in left arm. At the time of her deficits, the brain and cervical magnetic resonance imaging(MRI) taken at the previous clinic showed no evidence of CNS involvement or cervical radiculopathy. The spinal tapping showed no evidence of cerebrospinal fluid(CSF) inflammation and paraneoplasic antibody(Ab) tests for possible peripheral neuropathy associated with her symptoms were all negative. After transfer to rehabilitation unit electromyography(EMG) and nerve conduction study(NCS) showed left pan-brachial plexopathy above trunk level(Table.1). She also complained tender erythematous patch on left chin and biopsy result of this lesion reported suggestive of DLBCL. So we performed positron emission tomography PET)/CT and there found one more possible lymphoma near the left brachial plexus(Fig.1). Brachial plexus itself showed slightly increased uptake. As we found possible lesion at shoulder, additional MRI focused on axillary region was done(Fig.2). An axillary mass of 0.6cm diameter was found, and high signal intensity and thickend appearance were observed along the whole left brachial plexus. Consequently, sono-guided biopsy for the axillary mass was conducted and pathologic report comfirmed the involvement of DLBCL. The patient was trransferred to hemato-oncology department right after the diagnosis for chemotherapy. After the first chemotherapy, shoulder pain had been released mostly but the weakness persisted with no change. A follow-up EMG and NCS is planned after six-cycle of chemotherapy.

Conclusion

Involvement of lymphoma to peripheral nerve has been reported. However, invasion into the whole brachial plexus is very rare and hard to diagnos the underlying malignancy. When a unusual presentation of peripheral nervous system occurred and the pathophysiology is uncertain, possible relation to malignancy should be considered as an option of assessement because earlier intervention is the key prognositic factor for the malignancy.

Table 1. Result of initial EMG/NCS; brachial pan-plexopathy.

Electromyography			
Muscle	Nerve	Root	Comments
L Infraspinatus	Suprascapular	C56	PSW, Fibs Reduced interference
L deltoid	Axillary	C56	PSW, Fibs Reduced interference
L biceps brachii	Musculocut	C56	PSW, Fibs
L ext carpi radialis	Radial	C67	PSW, Fibs Reduced interference
L triceps	Radial	C678	PSW, Fibs
L flexor carpi radialis	Median	C678	PSW, Fibs
L APB	Median	C8T1	PSW, Fibs
L flexor carpi ulnaris	Ulnar	C78T1	PSW, Fibs
L abductor digiti minimi	Ulnar	C8T1	PSW, Fibs
L C-paraspinalis	Posterior rami	C5678	Normal
R C-paraspinalis	Posterior rami	C4567	Normal

Nerve conduction study	
Nerve	Comments
L suprascalular M	Low amplitude
L axillary M	Delayed latency Low amplitude
L musculocutaneous M	Delayed latency Low amplitude
L median M	Unobtainable
L Ulnar M	Low amplitude
L radial M	Unobtainable
L median S O/P	Unobtainable
L ulnar S O/P	Low amplitude
L lateral antebrachial S	Unobtainable
L median antebrachial S	Unobtainable
L dorsal ulnar cut S	Unobtainable

Fig.1. Positron emission tomography of patient. Chin lesion(blue circle) and axillary lesion(red circle)

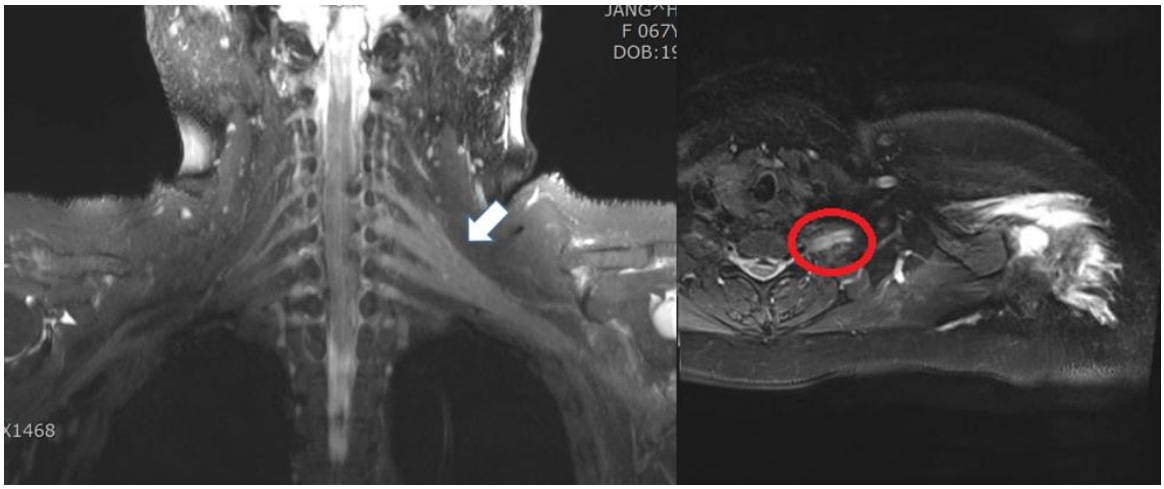

Fig.2. C-spine MRI of patient. Compared to the other side, marked thickening and increased signal intensity along the left brachial plexus was seen.